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March 15, 2007

**FILED VIA CM/ECF**

Clerk of Court  
U.S. District Court, District of Massachusetts  
Federal Building and Courthouse  
1550 Main Street  
Springfield, MA 01103

**Re: Arise for Social Justice, et al. v. City of Springfield, et al.**  
**Civil Action No. 05-30080-MAP**

Dear Sir or Madam:

Please find attached to this letter a substituted Trial Affidavit of Richard L. Engstrom (the "Engstrom Affidavit"). This substituted Engstrom Affidavit should replace the version that was filed on Friday, February 2, 2007, and that appears in the docket as document number 74.

The version of the Engstrom Affidavit attached hereto contains edits to the seventh sentence of paragraph 37, the last sentences of paragraphs 39 and 40, and the second sentence of paragraph 57.

Thank you for your assistance with this matter.

Very truly yours,

/s/ Monica M. Franceschini

Monica M. Franceschini

Attachment

cc: Edward Pikula, Esq. (w/attachment, via CM/ECF)

**CERTIFICATE OF SERVICE**

I hereby certify that this document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non-registered participants on March 15, 2007.

/s/ Monica M. Franceschini  
Monica M. Franceschini (BBO #651208)

**UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS**

ARISE FOR SOCIAL JUSTICE;  
 ¿OISTE?; NEW ENGLAND STATE-AREA  
 CONFERENCE OF THE NAACP;  
 REV. TALBERT W. SWAN, II;  
 NORMAN W. OLIVER; DARLENE  
 ANDERSON; GUMERSINDO GOMEZ;  
 FRANK BUNTIN; RAFAEL  
 RODRIQUEZ; and DIANA NURSE,  
  
 Plaintiffs,  
  
 v.  
  
 CITY OF SPRINGFIELD and  
 SPRINGFIELD ELECTION COMMISSION,  
  
 Defendants.

**TRIAL AFFIDAVIT OF RICHARD L. ENGSTROM, Ph.D.**

I hereby submit the following trial testimony:

1. My name is Richard L. Engstrom and I am a resident of Durham, North Carolina. I am employed as a consultant to the Center for Civil Rights at the School of Law, University of North Carolina, Chapel Hill, North Carolina. Before moving to North Carolina in 2006, I was a Research Professor of Political Science and Coordinator of Graduate Studies in the Department of Political Science at the University of New Orleans (UNO), and served as the Endowed Professor of Africana Studies at UNO from 2003 through 2005. I have served two terms as the Chairperson of the Representation and Electoral Systems Section of the American Political Science Association (1993-1995, 1995-1997) and continue to serve as a member of the Executive Council for that section. A copy of my curriculum vitae is attached as an Appendix to this affidavit.

2. I have done extensive research into the relationship between election systems and the ability of minority voters to participate fully in the political process and to elect representatives of their choice. The results of my research on this topic have been published in the *American Political Science Review*, *Journal of Politics*, *Western Political Quarterly*, *Legislative Studies Quarterly*, *Social Science Quarterly*, *Journal of Law and Politics*, *Electoral Studies*, *Representation*, and other journals and books. Three articles authored or co-authored by me were cited with approval in Thornburg v. Gingles, 478 U.S. 30, at 46 n.11, 49 n.15, 53 n.20, 55, and 71 (1986), the Supreme Court decision interpreting amended section 2 of the Voting Rights Act. I am the co-author, with Mark A. Rush, of *Fair and Effective Representation? Debating Electoral Reform and Minority Rights* (Lanham, MD: Rowman and Littlefield Publishers, Inc. 2001).

3. I have also testified as an expert witness in numerous court cases in federal and state courts across the United States. Since 2001 I have testified at trial and/or been deposed in the following cases: Johnson v. Hamrick (N.D. Ga. 2001), Del Rio v. Perry (200<sup>th</sup> Dist. Ct. Tx. 2001), Balderas v. State of Texas (E.D. Tx 2001), Johnson v. Bush (S.D. Fld. 2001), Jepsen v. Vigil-Giron (1<sup>st</sup> Judicial District Court, County of Santa Fe, NM 2001, 2002), Arizona Minority Coalition for Fair Redistricting v. Arizona Independent Redistricting Commission (Superior Court, County of Maricopa, AZ, 2002), Curry v. Glendening, Court of Appeals of Maryland (2002), Levy v. Miami-Dade Co (S.D. Fld. 2002), Dillard v. Baldwin Co. (M.D. Ala. 2002), Prejean v. Foster (M.D. La. 2002), Georgia v. Ashcroft (D.C. DC, 2002), Louisiana House of Representatives v. Ashcroft (D.C. DC 2002), United States v. Alamosa County (D. Co. 2003), Black Political Task Force v. Galvin and Camacho v. Galvin (D.C. Mass. 2003),

G.I. Forum v. Perry (E.D. Tx. 2003), Stewart v. Blackwell (N.D. Oh. 2004), Cottier v. City of Martin, S.D., (D.C. SD 2004), and Pender County v. Bartlett (General Court of Justice, Superior Court Division, County of Wake, NC 2005).

4. Attorneys for the plaintiffs in this case have asked me to analyze the extent to which the candidate preferences of African American, Latino, and other voters in Springfield, Massachusetts,<sup>1</sup> have differed in their candidate choices in the recent at-large elections for the city council and the school committee. These elections were held in 1999, 2001, 2003, and 2005 and all of them presented voters with a choice among African American and/or Latino candidates and other candidates.

5. Attorneys for the plaintiffs in this case have also asked that I respond, in this affidavit, to comments on my previous reports made by Stephan Thernstrom, the defendants' expert, in his "Expert Witness Report in Arise for Social Justice v. Springfield," dated May 24, 2006, and his "Rejoinder to Rebuttal Reports of Douglass Amy and Richard Engstrom," dated October 30, 2006.

6. I am being compensated at a rate of \$225 an hour for my work in this case.

#### **DATA AND METHODS**

7. The data utilized in the analyses of the candidate preferences of African

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<sup>1</sup> Unless otherwise stated, in this affidavit "African Americans" are people identified in the 2000 Census of Population as only African American in race and not Hispanic. African Americans, so defined, constitute 18.1 percent of the city's voting age population. "Latinos" are those that are identified as Hispanic, regardless of race. Latinos, so defined, constitute 21.8 percent of the city's voting age population. (Over 85 percent of the total population of Latinos is Puerto Rican, and therefore citizens of the United States.) "Others" are those that fit neither of the first two categories, and the people in this group are predominantly white. Those identified as only white in race and not Hispanic constitute 93.5 percent of the "others" of voting age in Springfield, and therefore this group will be identified hereinafter as white. United States Census of Population, 2000, Summary File 1(SF 1).

American, Latino, and other voters consist of the number of people receiving ballots in each precinct and the number of votes in each precinct cast for each of the various candidates, according to official election returns, and the total number of people of voting age, as well as the number of African Americans and Latinos in each precinct according to the 2000 census.

8. In assessing the extent to which the candidate preferences of the African American and Latino voters differed from those of the other (predominantly white) voters in these elections I have derived estimates of group support for candidates through ecological regression analysis. This procedure, which employs data for all of the precincts, is one of the two estimation procedures approved for this purpose by the United States Supreme Court in Thornburg v. Gingles, 478 U.S. 30, at 52-53 (1986).<sup>2</sup> The other is homogeneous precinct, or extreme case, analysis, which can be applied in Springfield to estimate only the preferences of the other (essentially white) voters. Homogeneous precinct analyses simply report the percentage of the voters supporting a candidate or set of candidates within the precincts in which a particular group constitutes over 90 percent of the voting age population. There are no such African American or Latino precincts in Springfield and therefore this procedure cannot be used to estimate the candidate preferences of those groups. There are six precincts however in which

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<sup>2</sup> Correlation coefficients that result from a simultaneous three-group analysis are partial correlations that do not have the same straightforward interpretation as the correlation coefficients that result from analyses concerning only two groups, and therefore are not reported in this analysis.

other voters constitute over 90 percent of the voting age population, and the levels of support for the various candidates in these essentially white precincts will be reported.<sup>3</sup>

### **RACIALLY POLARIZED VOTING**

9. The candidate preferences of Springfield voters in the elections in which they have been presented with a choice between or among African American, Latino, and/or white candidates have been consistently divided along racial and ethnic group lines. African American voters demonstrate, through their voting behavior, a preference for African American candidates, and Latinos likewise demonstrate a preference for Latino candidates. These preferences are not shared by the white voters, however, and their lack of support for these minority candidates usually results in the white voters vetoing these choices. The results of the analyses of these elections are reported in Tables 1 through 8.

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<sup>3</sup> The minor changes in precinct boundaries affecting the analysis of the 2001 and 2003 elections do not alter the results of the homogeneous precinct analyses. Another procedure that I often use to estimate group differences in candidate preferences is called Ecological Inference, or EI, which was developed subsequent to Thornburg v. Gingles. This procedure is the subject of Gary King, A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data (Princeton University Press, 1997). EI is not applied in this analysis, however, because it is not, at least as of yet, applicable to analyses involving more than two groups of voters, as is the case in this analysis of Springfield elections.

### **City Council Elections**

10. The Springfield city council consists of nine members elected every two years in nonpartisan at-large elections. Voters have up to nine votes to cast in each election, but are restricted to casting only one vote for any candidate. The nine candidates with the highest numbers of total votes are declared the winning candidates.

11. Tables 1 through 4 contain the results of the analyses for city council elections. African American and Latino candidates in these elections are identified by bold type, and the rank order of the candidates, in terms of overall votes, are reported after their names. The support levels for the various candidates within the various groups reflect the estimate of the percent of members of that group that received a ballot that cast a vote for that candidate. When the support level among African American voters or Latino voters is statistically significantly different from that for the white voters, an asterisk (\*) is placed next to that estimate.<sup>4</sup>

### **1999**

12. In 1999 two African Americans were among a field of 14 candidates for the nine seats on the council. No Latino sought a seat on the council in this election. The African American candidates were Bud L. Williams, a three-term incumbent, and Carol Lewis-Caulton. The regression analysis reveals that African American voters were strongly cohesive in their support for these African American candidates (Table 1). Ms. Lewis-Caulton finished first in the vote cast by African American voters, receiving a vote from virtually all of the African American voters. Mr. Williams finished second in the

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<sup>4</sup> Statistical significance is based on a t-test for the regression coefficient for the respective group, and statistical significance is assessed by the conventional standard of .05, meaning the probability of the difference between the two groups being attributable to chance is less than 5 in 100.



African American vote, receiving a vote from an estimated 93.3 percent of them.

13. Mr. Williams received a vote from an estimated 43.1 percent of the Latino voters, while Ms. Lewis-Caulton received a vote from an estimated 10.5 percent. They ranked seventh and fourteenth within the Latino vote. Mr. Williams was the tenth choice of the white voters, receiving an estimated 38.7 percent, and Ms. Lewis-Caulton received a vote from an estimated 30.2 percent, finishing fourteenth among white voters. (Mr. Williams finished ninth in the homogeneous white precincts with a vote from 40.1 percent, while Ms. Lewis-Caulton finished eleventh with a vote from 32.9).

14. White voters consistently voted for white candidates. White candidates were the top nine choices of the white voters according to the regression analysis (and the top eight choices in the homogeneous precinct analysis).

15. Mr. Williams finished sixth overall, while Ms. Lewis-Caulton won the ninth seat on the council by a small margin. This election is the only time two African Americans have been elected to the city council during the period under analysis.

### 2001

16. In 2001 four African Americans and two Latinos were among another field of 14 candidates. Mr. Williams and Ms. Lewis-Caulton were among the African American candidates, along with Charles Rucks and Charles Stokes. The Latino candidates were Jose F. Tosado and Alex Cortes. There were only eight white candidates in this election and therefore a minority candidate would have to win at least one seat unless write-in votes elected a ninth white.

17. The regression analysis reveals that African American voters were again strongly cohesive in their support for African American candidates (Table 2). The four

African American candidates were the top four choices of the African American voters. Mr. Williams finished first among the African American voters, receiving a vote from an estimated 99.6 percent of them. Ms. Lewis-Caulton finished second with a vote from an estimated 96.3 percent of the African American voters. Mr. Rucks and Mr. Stokes finished third and fourth respectively among the African American voters, receiving a vote from an estimated 77.4 percent and 45.5 percent of the African American voters.

18. Among the African American candidates only Mr. Williams won a seat on the council in this election. He finished seventh among the Latino voters, receiving a vote from an estimated 22.8 percent of them, and ninth among the white voters, behind all eight white candidates, receiving a vote from an estimated 48.7 percent of them. (In the homogeneous white precincts he also finished ninth with a vote from 47.8 percent.) He finished third in the overall vote.

19. Ms. Lewis-Caulton, despite being an incumbent, was not returned to the council. She finished twelfth among the Latino voters, receiving a vote from an estimated 11.1 percent of them, and tenth among the white voters, receiving a vote from an estimated 38.3 percent. (She finished eleventh in the homogeneous white precincts with a vote from 38.1 percent.) She finished eleventh in the overall vote.

20. Mr. Rucks and Mr. Stokes finished fourteenth and thirteenth respectively within the Latino vote, receiving a vote from an estimated 3.4 percent and 6.5 percent of these voters. They finished twelfth and thirteenth respectively among the white voters, receiving a vote from an estimated 20.7 and 10.0 percent. (They finished twelfth and fourteenth in the homogeneous white precincts, receiving a vote from 24.3 percent and 9.4 percent, respectively.) They finished twelfth and fourteenth overall.

21. Latino voters were cohesive in their support for the Latino candidates. Mr. Tosado finished first within the Latino vote, receiving a vote from an estimated 75.0 percent of the Latino voters, while Mr. Cortes finished second, receiving a vote from an estimated 67.9 percent. Among the African American voters, they finished seventh and fourteenth respectively, receiving a vote from an estimated 29.4 and 6.9 percent. Among the white voters, they finished eleventh and fourteenth, receiving a vote from an estimated 36.4 percent and 8.5 percent, respectively. (In the homogeneous white precincts, they finished eleventh and thirteenth, with votes from 36.3 percent and 10.3 percent, respectively.) Mr. Tosado and Mr. Cortes finished tenth and thirteenth in the overall vote, and therefore neither won a seat.

22. White voters again overwhelmingly voted for white candidates. The eight white candidates in this election were the top eight choices of the white voters according to the regression analysis and the homogeneous precinct analysis.

23. This election thus resulted in the election of all eight white candidates, seven of which were incumbents. The defeat of an African American incumbent reduced the number of African American council members to one, and no Latino candidate was elected.

### **2003**

24. In 2003 four African Americans and two Latinos were again candidates for the council, but this time there was a total field of 18 candidates. Mr. Williams and Ms. Lewis-Caulton were again among the African American candidates, along with Morris Jones and Hamilton Wray. The Latino candidates were again Mr. Tosado, who

was now an incumbent, having been appointed to fill a vacancy on the council, and Mr. Cortes.

25. The regression analysis reveals that African American voters were again strongly cohesive in their support for African American candidates (Table 3). African American candidates were their top three choices in this election. Ms. Lewis-Caulton finished first within the African American vote, receiving a vote from virtually all of the African American voters. Mr. Williams finished second with a vote from an estimated 96.7 percent. Mr. Jones was their third choice, receiving a vote from an estimated 69.7 percent. Mr. Wray was the seventh choice of the African Americans, receiving a vote from an estimated 31.9 percent.

26. Mr. Williams was again the only African American candidate to win a seat in this election. He finished sixth among the Latino voters, receiving a vote from an estimated 20.7 percent of them, and eleventh among the white voters, receiving a vote from an estimated 35.7 percent of them. (He also finished eleventh in the homogeneous white precincts, with a vote from 36.6 percent.) He finished seventh in the overall vote. Ms. Lewis-Caulton finished last, eighteenth, among the Latino voters, receiving a vote from an estimated 3.6 percent of them, and fifteenth among the white voters, receiving a vote from an estimated 25.9 percent. (She finished twelfth in the homogeneous white precincts, receiving a vote from 27.0 percent). She finished twelfth in the overall vote.

27. Mr. Jones finished sixteenth in both the Latino vote and the white vote, receiving a vote from an estimated 12.4 percent and 19.4 percent of these voters respectively. (He also finished sixteenth in the homogeneous white precincts, receiving a vote from 20.2 percent.) He finished thirteenth overall. The other African American

candidate, Mr. Wray, finished seventeenth in both the Latino vote and the white vote, receiving a vote from an estimated 7.1 percent of the Latino voters and 15.1 percent of the white voters. (He also finished seventeenth in the homogeneous white precincts, with a vote from 18.6 percent.) He finished last overall among the 18 candidates.

28. Latino voters again supported the Latino candidates. Mr. Tosado again finished first within the Latino vote, receiving a vote from an estimated 78.4 percent of the Latino voters, while Mr. Cortes finished second, receiving a vote from an estimated 56.5 percent. Among the African American voters, they finished fourth and fourteenth respectively, receiving a vote from an estimated 44.6 and 9.8 percent respectively. Among the white voters, they finished tenth and last (eighteenth), receiving a vote from an estimated 38.0 percent and 12.6 percent, respectively. (In the homogeneous white precincts, Mr. Tosado also finished tenth with a vote from 39.7 percent, while Mr. Cortes finished last with a vote from 12.8 percent.) Mr. Tosado finished third overall and won a seat, while Mr. Cortes finished seventeenth.

29. Again there was a strong preference among white voters for white candidates. The top nine candidates of the white voters were white candidates according to both the regression analysis and the homogeneous precinct analysis. Whites supported all seven white incumbents in this election, but not the African American incumbent nor the Latino incumbent.

### 2005

30. In 2005 three African Americans and three Latinos were candidates for the council, and there again was a total field of 18 candidates. Mr. Williams and Mr. Wray were again among the African American candidates, along with Norman Oliver. The

Latino candidates included Mr. Tosado again, and Mr. Clodovaldo Concepcion and Mr. Rafael Nazario.

31. The regression analysis reveals that African American voters were again strongly cohesive in their support of Mr. Williams, who received a vote from virtually all of the African American voters (Table 4). They also made Mr. Oliver their fourth choice with 42.0 percent, and Mr. Wray their seventh choice with 35.0 percent.

32. Mr. Williams was again the only African American candidate to win a seat in this election. He finished fifth among the Latino voters, receiving a vote from an estimated 29.8 percent of them, and eleventh among the white voters, receiving a vote from an estimated 34.2 percent. (He finished tenth in homogeneous white precincts with 36.2 percent). He finished sixth in the overall vote. Mr. Oliver and Mr. Wray finished thirteenth and fourteenth among the Latino voters, receiving a vote from an estimated 16.6 percent and 14.9 percent respectively. They finished sixteenth and thirteenth among the white voters, receiving a vote from an estimated 18.9 percent and 23.0 percent respectively. (They also finished sixteenth and thirteenth in the homogeneous white precincts, receiving a vote from 16.8 percent and 23.1 percent respectively). They finished twelfth and thirteenth in the overall vote.

33. Latino voters again supported the Latino candidates. Mr. Tosado again finished first within the Latino vote, receiving a vote from an estimated 76.4 percent of the Latino voters, while Mr. Nazario was their second choice, receiving a vote from an estimated 44.9 percent. Mr. Concepcion was their tenth choice, with 20.6 percent.

34. Mr. Tosado was the third choice of the African American voters with a vote from an estimated 42.1 percent of them, while Mr. Nazario was their fourteenth

choice, with 10.2 percent. Mr. Concepcion finished eleventh among the African American voters, with an estimated 18.3 percent.

35. Mr. Tosado received a vote from an estimated 39.2 percent of the white voters, placing him ninth in their vote. Mr. Concepcion received a vote from an estimated 36.4 percent of them, placing him tenth in their vote. Mr. Nazario finished last among the white voters with an estimated 15.6 percent. (In the homogeneous white precincts, Mr. Tosado finished ninth with 38.7 percent, Mr. Concepcion finished eleventh with 30.2 percent, and Mr. Nazario finished last with 15.9 percent.) Mr. Tosado finished fourth overall and won a seat, while Mr. Concepcion finished eleventh and Mr. Nazario finished fifteenth.

36. The top eight choices of the white voters were white candidates, including the six white incumbents running for re-election, according to both the regression analysis and the homogeneous precinct analysis. Their final (ninth) choice, with 39.2 percent support, was the Latino incumbent. The African American incumbent was not among the top nine.

37. The candidate preferences in city council elections among the groups analyzed are clearly polarized along group lines. There is an unmistakable preference within each group for candidates from within that group. This occurred in each of the four elections. Minority candidates preferred by voters within their group were vetoed by the rest of the electorate in every election except the city council election in 1999. In that election two African Americans were elected. This was not repeated however in the 2001, 2003, or 2005 elections, in which only one African American, a long term incumbent, was able to win a seat. The African American who had won the ninth seat in

1999 by a margin of 284 votes was vetoed in 2001 and again in 2003, despite the extremely high levels of African American support for her. Latinos did not elect a Latino candidate until the 2003 election, when a Latino that had been appointed to the council earlier that year was elected. This candidate was reelected in 2005.

38. Minority candidates have failed to win one of the nine council seats despite receiving high levels of support from their respective groups. For example, in 2003 Ms. Lewis-Caulton received a vote from virtually all of the African American voters but failed to win a seat, while in 2001 she received a vote from 96.3 percent of them and also failed to win a seat. In 2001 Mr. Tosado received a vote from an estimated 75 percent of the Latino voters and failed to win a seat. The highest white support for a losing white candidate was, in contrast, an estimated 52.9 percent for Mr. Ryan in 2003.

39. The lowest level of African American support for a winning African American candidate was for Mr. Williams in 1999, 93.3 percent. The lowest Latino support for a winning Latino candidate was for Mr. Tosado in 2005, 76.4 percent. In contrast, two white candidates in 2005, Ms. Walsh and Mr. Stebbins, were elected with as few as 43.4 percent and 47.1 percent of the white voters voting for them, respectively.

40. The incumbency status of candidates is not an explanation for the racial disparities in candidate preferences in these city council elections. African American, Latino, and white voters respond differently to incumbents depending on the race or ethnicity of the incumbent. African Americans have run as incumbents for the city council on five occasions over the period studied. Mr. Williams was strongly preferred by African Americans in all four of the city council elections. Yet the only time he was even in the top nine candidates supported by white voters was in 2001, when there were



only eight white candidates contesting the nine seats. In that year he finished behind all eight white candidates in the white vote, trailing even the only nonincumbent white candidate. Ms. Lewis-Caulton was an incumbent in the 2001 election as well, and despite receiving a vote from an estimated 96.3 percent of the African American voters that year, did not finish among the top nine candidates supported by white voters. Mr. Tosado was an appointed incumbent in 2003 and sought reelection in 2005. Despite being the first choice of Latino voters each year, he was the tenth choice of white voters in 2003, and the ninth choice of white voters in 2005.

#### **School Committee Elections**

41. The Springfield school committee consists of six members elected to four-year terms in staggered elections. Each election is for three seats and the voters in these elections have up to three votes to cast. Voters are again restricted to casting only one vote for any candidate. The three candidates with the highest numbers of total votes are declared the winning candidates. School committee elections are also nonpartisan and at-large, and are held simultaneously with the city council elections. The voters receiving ballots for the school committee elections are therefore the same voters that are receiving ballots in the city council elections.

42. Tables 5 through 8 contain the results of the analyses for school committee elections. These tables are structured identically to Tables 1 through 4. African American and Latino candidates are identified by bold type, and the rank order of the candidates, in terms of overall votes, are reported after their names. The support levels for the various candidates within the various groups also reflect the estimate of the

percent of members of that group that received a ballot that cast a vote for that candidate. When the support level among African American voters or Latinos voters is statistically significantly different from that for the white voters, an asterisk (\*) is placed next to that estimate. The results of the analyses of the school committee elections reveal polarized voting similar to that in the council elections.

### 1999

43. In 1999 one African American and one Latino were among a field of five candidates for the three seats on the school committee. The African American candidate was Robert McCollum, a three-term incumbent. The Latino candidate was Jose Tosado. The regression analysis reveals that African American voters were strongly cohesive in their support for Mr. McCollum (Table 5). He was their first choice and received a vote from virtually all of the African American voters. Among Latino voters, however, he was the fourth choice, receiving a vote from an estimated 23.7 percent of them, and he was the last choice of the white voters, receiving a vote from an estimated 29.3 percent of them. (In the homogeneous white precincts he also finished last, receiving a vote from 34.8 percent.) He finished fourth overall and lost his seat on the committee.

44. Mr. Tosado was the first choice of the Latino voters, receiving a vote from an estimated 79.0 percent of them. He was the second choice of the African American voters, receiving a vote from an estimated 29.7 percent of them, and the fourth choice of the white voters, receiving a vote from an estimated 38.0 percent. (He was the third choice in the homogeneous white precincts, receiving a vote from 40.1 percent.) He finished second overall and was elected. The top three choices of the white voters were

the three white candidates in the election according to the regression analysis (while the top two were white according to the homogeneous precinct analysis).

### 2001

45. In 2001 two African Americans were among a field of five candidates for the three seats. No Latino candidate ran for a seat. The African American candidates were Marjorie Hurst, an incumbent, and Desiree Parker. The regression analysis reveals that African American voters were again supportive of the African American candidates (Table 6). Ms. Hurst was their first choice, receiving a vote from virtually all of the African American voters. Ms. Parker was their second choice, receiving a vote from an estimated 59.6 percent of them. Among Latino voters, however, Ms. Hurst was the fourth choice, with a vote from an estimated 18.4 percent of them, while Ms. Parker was the last choice, with a vote from 12.3 percent. Ms. Hurst and Ms. Parker were likewise the fourth and fifth choice of the white voters, receiving a vote from an estimated 42.8 percent and 13.0 percent, respectively. (In the homogeneous white precincts they were likewise the fourth and fifth choices, receiving a vote from 43.9 percent and 12.6 percent respectively.) The white voters made the three white candidates their first three choices according to both the regression and homogeneous precinct analyses. Ms. Hurst finished third and won a seat, while Ms. Parker finished fifth.

### 2003

46. There was one African American and one Latino candidate among the six candidates seeking seats on the committee in 2003. The African American was Mr. McCollum, who as an incumbent was not reelected in 1999. He was subsequently appointed to fill a vacancy on the committee in 2003, prior to this election. The Latino

candidate was Victor Davila. Mr. McCollum was again the first choice of the African American voters, receiving a vote from an estimated 95.3 percent of them (Table 7). He finished sixth and fifth, however, within the votes cast by Latino and white voters, receiving a vote from an estimated 7.3 percent of the Latinos receiving ballots and 34.3 percent of the whites. (He was also fifth in the homogeneous white precincts, receiving a vote from 39.0 percent.) Mr. McCollum finished fourth and therefore was again defeated.

47. Mr. Davila was the first preference of the Latino voters, receiving a vote from an estimated 66.6 percent of them. He was the fifth and sixth choices of the African American voters and the white voters however, receiving a vote from an estimated 12.8 percent of the African Americans and 8.4 percent of the whites. (In the homogeneous white precincts he also finished sixth, with a vote from 9.4 percent.) He finished last overall. The white voters made the four white candidates their top four choices in this election according to both the regression and the homogeneous precinct analyses. Their top three choices were elected to the three seats.

### 2005

48. Minority candidates constituted a majority of the candidates (three of five) in the 2005 election for three seats on the school committee. Two were Latinos and one was an African American. The African American was Ms. Hurst, an incumbent, while the Latino candidates were Mr. Davila again and Orlando Santiago. Ms. Hurst was again the first choice of the African American voters, receiving a vote from virtually all of them (Table 8). She finished third within the votes cast by Latino and white voters, receiving a vote from an estimated 23.5 of the Latinos receiving ballots and 45.8 percent of the

whites. (She also finished third in the homogeneous white precincts, receiving a vote from 45.8 percent of the voters in those precincts.) Ms. Hurst finished first in overall vote and therefore was reelected.

49. Mr. Santiago was the first preference of the Latino voters, receiving a vote from an estimated 66.9 percent of them. He was the second choice of the African American voters and the fourth choice of the white voters, receiving a vote from an estimated 30.1 percent of the African Americans and 33.2 percent of the whites. (In the homogeneous white precincts he also finished fourth, with a vote from 33.0 percent.) He finished fourth overall.

50. Mr. Davila was the second preference of the Latino voters, receiving a vote from an estimated 56.2 percent of them. He was the fourth choice of the African American voters, receiving a vote from an estimated 21.6 percent of the African Americans, and the last choice of the whites, receiving a vote from an estimated 24.2 percent of them. (He also finished last in the homogeneous white precincts, with a vote from 24.4 percent.) He finished last overall.

51. The two white candidates were the top two choices of the white voters, in both the regression and homogeneous analyses, and both were elected.

52. Voting in the at-large school board elections, which as noticed above are also nonpartisan and are held simultaneously with the city council elections, also reveals a pronounced tendency for the voters of the respective groups to prefer candidates from within their group. As in the city council elections, both African American and Latino candidates preferred by their respective groups were usually vetoed by the white voters.

53. Minority candidates have failed to win one of the three school committee seats at issue in these elections despite receiving high levels of support from their respective groups. For example, in 1999 Mr. McCollum received a vote from virtually all of the African American voters but failed to win a seat. In 2005 Mr. Santiago received a vote from an estimated 66.9 percent of the Latino voters and failed to win a seat. The highest white support for a losing white candidate was, in contrast, an estimated 49.4 percent for Mr. Rodgers in 2001.

54. The only African American to win a seat on the school committee over these four elections was Ms. Hurst, who won a seat in 2001 and 2005, in both of which she received a vote from virtually every African American voter. Among Latino candidates, only Mr. Tosado won a seat, in 1999, when he received a vote from an estimated 79.0 percent of the Latino voters. In contrast, Ms. Pepe, a white candidate, was elected in 2003 election with an estimated 49.0 percent of the white voters voting for her.

55. The incumbency status of candidates is also not an explanation for the racial disparities in candidate preferences in these school committee elections. African American and white voters respond differently to incumbents depending on the race or ethnicity of the incumbent. African Americans have run as incumbents for the school committee on four occasions. Mr. McCollum was strongly preferred by African Americans both times he ran, in 1999 and 2003, the later year as an appointed incumbent. In neither of these elections was he even among the top three candidates supported by white voters. Ms. Hurst was an incumbent in the 2001 and 2005 elections and was likewise strongly favored by the African American voters. She also failed to finish among the top three candidates in white support in 2001. She did finish third among

white voters in 2005, however there were only two white candidates for the three committee seats that year.

### **CONCLUSION**

56. Voting in the past four city council elections, and in the simultaneous school committee elections, has been polarized along racial and ethnic group lines. African Americans and Latinos in Springfield, protected groups under the Voting Rights Act, have a pronounced preference to be represented by people from within their own group. This was revealed for African Americans in all eight elections. It was also revealed for Latinos in all six of the elections in which there were Latino candidates. The white voters in the city do not share these preferences. They reveal a distinctly different preference, which is for white candidates in these elections.

57. In only one of the city council elections have two African Americans been elected. This occurred in 1999, when one of the African Americans won the ninth seat by a margin of 284 votes. This was not repeated in 2001, 2003, or 2005, however. Indeed, one of the incumbent African American candidates was defeated for reelection in 2001, despite her African American support being estimated at 96.3 percent. She was again denied a seat in the 2003 election, despite her African American support being estimated at virtually 100 percent. A Latino candidate did not win a seat until the 2003 election, after being appointed to the council earlier that year. He was reelected in 2005. The nine-member council elected at-large after the last election therefore consists of only one African American and one Latino, a combined 22.2 percent of the council, despite these groups, each of which is politically cohesive, constituting together about 40 percent of the voting age population in the city.

58. A similar situation occurs, as of the last election, with the school committee. No minority person won a seat on the committee in 2003, despite the African American and Latino candidates being preferred by the voters of their respective group. The 2005 election resulted in the reelection of the African American incumbent, but the two Latino candidates, both preferred by Latino voters, were defeated. The school committee therefore consisted of only one minority member (16.7 percent) following the last election.

### **REBUTTAL TO MAY 24, 2006 REPORT OF STEPHAN THERNSTROM**

#### **The Selection of Elections**

59. Prof. Thornstrom states that “The first noteworthy thing” about my analysis of group voting behavior in Springfield “is that it is restricted to a mere six-year period, from 1999 to 2005” (at para. 43). This period covers, of course, the *last four* elections to the Springfield city council and the *last four* elections to the School Committee. Thornstrom characterizes these as elections held “just yesterday and the day before yesterday” (at para. 43). He does not, however, suggest how far back in time this analysis of elections should go, nor what we might learn about the voting behavior of groups in Springfield today by analyzing elections held prior to this period. Indeed, despite his criticism of my analysis, he offers no analysis of older elections himself.

60. The timeframe for my analysis of elections was based initially on the Supreme Court’s decision in Thornburg v. Gingles, 478 U.S. 30 (1986). The election analysis relied upon in that case concerned the last three elections held in the state legislative districts in North Carolina at issue in that case (*ibid.*, at 61). These elections



occurred over a four-year time period; they were those of 1978, 1980, and 1982 (see the Appendix to Gingles, at 80).

61. My initial analysis for this case was reported in an affidavit dated June 15, 2005. The analysis at that time was based, as in Gingles, on the last three elections for the city council and the school committee, those for 1999, 2001, and 2003, which also covered a four-year time period. After this case was filed another election was held in Springfield, in 2005, so this post-litigation election was also analyzed and the results of that analysis included in my report of March 8, 2006. The number of elections and the timeframe in which they occurred, therefore, both exceed those relied upon by the Supreme Court in Gingles.

62. The inquiry in a vote dilution case like this one concerns whether an election system is dilutive today. Given this, it is understandable, as a general matter, that more recent elections are considered more probative of racially polarized voting than older elections. This is especially the case in this litigation, as the demographic characteristics of Springfield's voting age population have been changing. As expressed by the First Circuit Court of Appeals in Vecinos de Barrio Uno v. City of Holyoke 72 F.3d 973, 990 (1<sup>st</sup> Cir., 1995):

The ultimate question in any section 2 case must be posed in the present tense, not the past tense. The court must determine whether the challenged electoral structure deprives a racial minority of equal opportunity to participate in the political process at present. Though past elections may be probative of racially polarized voting, they become less so as an environment changes. In particular, elections that present insights into past history are less probative than those that mirror the current political reality.

63. Prof. Thernstrom's critique of my selection of elections is especially curious given his own recognition of "the rapidly changing demographic landscape of the city" (para. 26). He reports that the percentage of voting age population in the city that Hispanics constitute has increased from 6.0 in 1980 to 12.8 in 1990 to 21.8 in 2000, while that which African Americans constitute has increased from 13.9 in 1980 to 16.4 in 1990 to 18.4 in 2000 (Table 2, p. 29, in his report). Indeed, he reportedly finds the plaintiffs' reliance on the latest census figures for Springfield, those for 2000, to be "deeply problematic" because they are "now six years old" (para. 26). Given his concern for the "new demographic realities" of Springfield (para. 32), it is difficult to take seriously his suggestion that an analysis of elections prior to 1999, for an unknown length of time, will somehow contribute to an understanding of voting behavior in Springfield today.

#### **The Estimates of Group Candidate Preferences**

64. Prof. Thernstrom also suggests that the results of my analysis of these recent elections "be taken with more than a few grains of salt" (para. 57). He writes that the results I report "are only estimates" (para. 52, emphasis is Thernstrom's), as they must be given the secrecy of the vote. In fact, the words "estimate", "estimates", "estimated", and "estimation" appear in the text of my report over 70 times, and "estimated" appears in the title of every single table.

65. It must be noted that just as Prof. Thernstrom did not analyze any elections prior to 1999, neither did he provide any alternative estimates of group voting behavior for the elections of 1999 through 2005. Indeed, his attack on my numbers is especially curious, given that he stated in deposition, subsequent to his report, that:

in fact, my main discussion of Engstrom does not challenge the estimates of voting behavior by groups. It is rather a challenge to how he sums it up and interprets it. So I don't think really the validity of his estimates are of central, you know, challenge posed by the defendants. We're willing to accept them (Thernstrom deposition, August 2, 2006, 60).

Despite his willingness to accept my estimates, paragraphs 52 through 60 of his report are devoted to challenging those estimates. I therefore feel the need to respond to his apparently superfluous commentary.

66. The regression analysis I performed is the same type of analysis performed for, and relied upon by the Supreme Court in, the Gingles case (at 52-53). It has been a standard approach used to measure racially polarized voting by expert witnesses for both the plaintiffs and defendants in vote dilution cases. For a recent example of experts for both the plaintiffs and defendants using regression, see Black Political Task Force v. Galvin, 300 F. Supp. 2d 291, 303 (D. Mass 2004).

67. Prof. Thernstrom also states that homogeneous precinct analysis is “a method of checking the accuracy of ecological regression estimates” (para. 55, emphasis mine). If homogeneous precinct analyses were a check on the accuracy of regression results there would not be any need to perform regression. The homogeneous precinct results would presumably be all we need. Homogeneous precinct analyses however are not a check on the accuracy of regression results, but rather another, separate way of deriving estimates of group voting behavior. It is simply a second measurement technique. If two different measurement techniques result in similar estimates, the confidence one can have in the estimates is enhanced. But that does not mean that if homogeneous precinct estimates vary in meaningful ways from regression results that the regression estimates are somehow not reliable. It is the homogeneous precinct results

that are generally most suspect in that situation. Thernstrom himself points out that homogeneous precinct analyses rely, in almost all applications, on a subset of precincts, specifically those that are “composed almost entirely of voters of one race” (para. 55). This provides information, obviously, only about voting “in those places” (para. 55, emphasis is Thernstrom’s), rather than throughout the jurisdiction at issue, as regression analyses do.

68. He also notes that there are not any homogeneous African American precincts or homogeneous Hispanic precincts in Springfield, which precludes estimates for these groups derived through that method. He does note, however, that there are six precincts that qualify as homogeneous based on the percentage of other people of voting age in them [hereinafter identified as white given that the non-Hispanic, non-African American population in Springfield is 93.5 percent white only (see footnote 1 of this affidavit). The levels of support for African American and Hispanic candidates provided within these homogeneous precincts are contained in my report for all eight elections analyzed, but Thernstrom never references any of them. If he is correct, and homogeneous precinct estimates check the accuracy of regression results, then these estimates would confirm the accuracy of my corresponding regression estimates.

69. A comparison of these estimates is provided in Table 9 for the city council elections and Table 10 for the school committee elections attached to this affidavit. These comparisons enhance the confidence one can have in the reliability of the results for white voters. The average absolute difference in estimates for the minority candidates for the city council is 1.54 percentage points, with the range of differences being from - 3.6 through 6.2. The average absolute difference in estimates for the minority candidates

for the school committee is 1.64, with the range of differences being from -5.5 through 0.4.

70. Prof. Thernstrom also points out that six out of the 255 estimates of group support for a particular candidate that I report exceed 100.0 percent. All of these estimates concern African American support for African American candidates. He specifically points out two of the three estimates for Ms. Lewis-Caulton's African American support in city council elections, those of 106.4 percent in 1999 and 101.3 percent in 2003. (The estimate for 2001 is 96.3 percent.) He states, "It is tempting to dismiss them as minor glitches, and to assume that they mean the true figure must have been 100 percent or very close to it" (para. 56), which is in fact the common response to estimates like these.<sup>5</sup> Prof. Thernstrom however claims to be troubled by this, asking whether all of my estimates are "considerably off the mark" (para. 57, emphasis mine). His answer is, referring to himself, "I don't know" (*ibid.*).

71. Prof. Thernstrom provides no reason to consider the estimates for Lewis-Caulton to be "considerably off the mark," let alone the estimates for any other candidate. Indeed, he himself apparently doesn't believe they are, for in his deposition he acknowledges that African American candidates, including Lewis-Caulton, had strong support from African American voters in every election:

Q. In the elections that were analyzed by Dr. Engstrom '99 through 2005, fair to say that blacks almost invariably had one and sometimes more than one candidate who blacks supported at a rate of 90 percent or more?

A. Yes. Fair enough (at 92-93).

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<sup>5</sup> See, e.g., Bernard Grofman, Lisa Handley, and Richard G. Niemi, Minority Representation and the Quest for Voting Equality (New York: Cambridge University Press, 1992), 101-102.

...

Q. Mr. Williams, like Ms. Lewis-Caulton, when she was running, had between 90 and 100 percent of the African American support, correct –

Right.

Q. – in the city?

A. Yes (at 103).

72. Prof. Thornstrom also claims to find my use of statistical significance tests to be “incomplete and deceptive,” or more accurately and equivocally, he states it “seems” to be (para. 58). He continues by asserting “It would be more accurate to say that the odds that the differences are attributable to chance are less than .05,” which is what I report, “only if it is indeed true that voting behavior in these Springfield elections was entirely determined by race and race alone” (para. 58, emphasis Thornstrom’s). A significance test, however, simply concerns whether an observed relationship may be attributable to chance, not whether something is entirely determined by something else.

73. Prof. Thornstrom also mentions survey research in his report (para. 59). His commentary is again off the mark. He says that survey researchers can have “complete confidence” that their estimates of group support for a candidate, within a specified margin or error (e.g., 3.5%) and confidence interval (e.g., 95 out of 100). There is no way they could have “complete confidence” in their estimates without knowing the true value of the support levels, but if that information were available there would of course be no need to estimate it through a survey.

74. According to him, “the chance of their [survey estimates] being erroneous is determined by sample size, assuming that the model itself corresponds perfectly to social reality” (para. 59, emphasis mine). Prof. Thornstrom ignores common problems in

survey research, especially when the context is racially sensitive, that are not accounted for by confidence intervals and margins of error. One issue concerns whether the sample is truly random, or whether there is selection bias in who participates. Exit polls, for example, have tendencies to overrepresent some groups of voters (e.g., individuals with high incomes, and whites) and to underrepresent others (e.g., low income individuals and minorities). And even assuming that the sample is not contaminated by selection bias, there is the problem of accurate projection of how a voter will vote in pre-election polls, and accurate recall (intentional or not) of how they voted in post-election polls. The honesty with which some voters report how they voted in exit polls is likewise questioned, especially in elections in which candidates of different racial and language groups are competing.<sup>6</sup> Thornstrom's confidence in survey research exceeds that of those who perform surveys. It should also be noted that he himself offers no survey based evidence of candidate preferences in Springfield elections.

75. Perhaps the reason Thornstrom is "willing to accept" the estimates I report (Thornstrom deposition, at 60) is that he expects "whites, blacks, and Latinos in Springfield ... to vote for different candidates" (para. 96). In fact, according to Thornstrom, "It would be astonishing if that were not the case" (*ibid*). He dismisses these differences, however, by treating them as if they are no different than those based on other social characteristics. He writes:

Divide Americans into groups on the basis of any social characteristic you can think of – sex, religion, income, occupation, marital status, educational attainment, suburban versus central city residence, region, and countless others – and you will find distinct political differences between them.

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<sup>6</sup> See Richard L. Engstrom, "Expert Witness Testimony," Encyclopedia of Social Measurement, Vol. 1 (London: Elsevier Inc., 2005), 921 – 922.

So too with race (ibid).

76. Thernstrom offers absolutely no documentation for this statement.

He cites no research, by himself or others, to support the notion that race is just another social cleavage, similar to gender, for example, or marital status, or educational attainment. Unfortunately race is not just another social cleavage in American politics. It is, to the contrary, the most pronounced. While other social cleavages may be considered “gaps,” race is considered to be a “divide.” In fact, when it comes to race:

The differences are enormous, quite unlike any social cleavage, and cannot be explained by black-white differences in income, or educational attainment or anything else. The racial divide in political aspirations and demands is really racial.<sup>7</sup>

#### **Thernstrom’s Interpretation of the Results**

77. Professor Thernstrom also claims that “substantial numbers” of whites vote for minority candidates in Springfield (para. 61). This statement must be placed in its proper context, however. City council elections are nine-vote nine-seat elections. School committee elections are three-vote three-seat elections. Nine candidates are therefore elected to the city council in every election, and three to the school committee. Voters have up to nine votes to cast in the council elections, and up to three in the school committee elections. An analysis of group support levels for candidates therefore cannot rely only on the estimated levels of support for particular candidates. It must also take into account the relative levels of support groups provide to the other, competing candidates. In my report, and in this affidavit, I therefore identify how candidates rank in

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<sup>7</sup> Donald R. Kinder and Lynn M. Sanders, Divided by Color: Racial Politics and Democratic Ideals (Chicago: University of Chicago Press, 1996), 9. See also Donald R. Kinder and Nicholas Winter,



terms of group support. Thornstrom chooses to ignore these rankings and present an incomplete picture of group support.

78. How substantial is the white support for minority candidates when one looks at not just absolute support levels for particular candidates but also where those candidates rank within the white vote? How many times do minority candidates finish in the white voter's top nine choices in the council elections, and top three choices in the school committee? In other words, how many minority candidates would have been elected, as a result of this "substantial" white vote, if only the votes cast by whites were counted?

79. Only in one of the eight elections did white voters place a minority candidate among their top nine candidates for the city council, or top three candidates for school committee, rather than a white candidate, and that occurred in the post-litigation election held in 2005, when the minority candidate finished ninth within the white vote. White voters did include a minority candidate, Mr. Williams, in their top nine council candidates in 2001. But this was the year in which there were only eight white candidates for the council, so at least one minority had to be included in their top nine. The eight white candidates were the top eight ranked candidates in the white vote. The minority candidate included in their top nine was Mr. Williams, a four-term incumbent. He was their ninth choice in this situation. The only minority candidate ranked in the top nine council candidates of white voters rather than a white candidate was Mr. Tosado. This occurred, as noted above, in the post-litigation election of 2005. He was also an incumbent, and he also finished ninth in the white vote.

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"Exploring the Racial Divide: Blacks, Whites, and Opinion on National Policy," American Journal of Political Science, 45 (April) 2001, 439-453.

80. Only one minority candidate has placed in the top three candidates among white voters in the school committee elections. This also occurred in the post-litigation election of 2005. And this was another instance in which at least one minority candidate had to finish in the top three, however, as there were only two white candidates in this contest. Ms. Hurst, another long time incumbent, was the third choice of the white voters, trailing both white candidates.

81. Despite the so-called “substantial” white vote for minority candidates, only once across the eight elections would a minority candidate have won a seat, if only white votes were counted, over a white candidate.

82. Prof. Thernstrom also claims that white voters provided minority candidates with greater support than the other minority groups’ voters. He notes that there were 18 African American candidacies across the eight elections, and eleven Latino candidacies. He reports that “Latinos gave less support than whites did for 17 of these 18 African American contenders,” and that “in 8 of the 11 cases, Latinos won a higher share of the white vote than of the black vote” (page 44, emphasis Thernstrom’s).

83. Again, Thernstrom fails to report the rankings of candidate support within these groups. As noted above, only three minority candidates would have been elected, based on the white vote, across these eight elections, two of which would have been elected when there were not enough white candidates to win all of the seats. And both of these minority candidates won the last seat. If only Latino votes had been counted, Mr. Williams would have won a seat in all four city council elections. He placed higher in the Latino vote than in the white vote in all of these elections. In 1999 he finished seventh in the Latino vote but tenth in the white vote. In 2001 he placed

seventh in the Latino vote again, compared to winning that last seat in 2001. In 2003 he placed sixth in the Latino vote, compared to eleventh in the white vote, and in 2005 fifth in the Latino vote compared to eleventh in the white vote. In addition, Ms. Hurst would have been elected in the 2005 school committee elections, finishing third behind the two Latino candidates.

84. In addition, more Latino candidacies would have been successful if only the African American vote were counted than if only the white vote were counted. Mr. Tosado would have won a seat in all four of his elections. In the 1999 school committee election he placed second in the African American vote, compared to fourth in the white vote. In the 2001 city council election he placed seventh in the African American vote, compared to eleventh in the white vote. In the 2003 and 2005 city council elections he finished fourth and third in the African American vote respectively, compared to tenth and ninth in the white vote. Likewise, Mr. Santiago finished second in the African American vote in the 2005 school committee election, compared to fourth in the white vote.

85. Under the plurality vote rule that determines winners in these Springfield elections, these minority candidates, all of whom were strongly supported by voters within their own group, had relatively more support among the other minority voters than among white voters.

86. Nothing in Prof. Thornstrom's critique of my report, or in his interpretation of my numbers, makes me alter the conclusions I expressed in my previous report.

**RESPONSE TO STEPHAN THERNSTROM'S**  
**"REJOINDER TO REBUTTAL REPORTS"**

**The Selection of Elections**

87. Dr. Thernstrom begins his Rejoinder to my Rebuttal, at paragraph 34, by reiterating his complaint, contained in his Expert Witness Report, that I did not include elections prior to the 1999 city council and school committee elections in the analysis of racially polarized voting contained in my Report. In that Report I examined the extent to which the candidate preferences of African American, Latino, and other voters (predominantly non-Hispanic whites)<sup>8</sup> have differed in their candidate choices in the recent at-large elections for the Springfield City Council and Springfield School Committee. This polarized voting analysis addresses the second and third "necessary preconditions" that the United States Supreme Court found, in Thornburg v. Gingles [478 U.S. 30, 50-51, (1986)], to be essential to a successful vote dilution claim under section 2 of the Voting Rights Act. These are that minority voters be politically cohesive and that majority voters usually veto their preferred candidates (at 51). Initially I analyzed the last three elections held prior to this case being filed, those in 1999, 2001, and 2003, as the Supreme Court found the last three elections to be sufficient in analyzing polarized voting in Gingles (at 61). After the filing of this case, the 2005 elections to the city council and school committee were held, so I analyzed and reported on these elections as well. My analysis of racially polarized voting in Springfield therefore covered the last

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<sup>8</sup> According to the 2000 Census of Population, people who identify as only white in race and not Hispanic constitute 93.5 percent of the voting age population among the "others," (i.e., those neither African American nor Hispanic). Thernstrom reports this figure to be 93.2 in 2005, based on the American Community Survey, and 93.3 in 2006, based on his own estimate (Table 2 of his Rejoinder, at 10). If this group constituted a voting precinct of its own, that precinct would be classified as "homogeneously white." This group therefore will continue to be referred to as white in this affidavit.

four elections, which were held over a six-year period, for both the city council and the school committee. A total of eight at-large elections in Springfield, starting in 1999, were examined.

88. Prof. Thernstrom criticized my selection of elections in his Expert Witness Report. This criticism was contained in Part IB of that report. Part I is titled “THE THREE PRONGS OF THE GINGLES TEST” (at 3), and subpart B is titled “Minority political cohesion and the issue of white bloc voting in Springfield” (at 24). In his first paragraph under subpart B he states that “The expert report submitted by Dr. Richard Engstrom is the primary source of evidence on both these issues” (para. 42). His criticism of my selection of elections, in short, was in the context of Gingles’ second and third prongs. His “first noteworthy” criticism of my analysis of these necessary preconditions was that it was restricted to “a mere six-year period” (para. 43). He opined that I should have analyzed elections further back in time, although he did not identify how far back.

89. I pointed out in my Rebuttal that I had exceeded both the number of elections and the period of time examined in the analysis of racially polarized voting in Gingles (four rather than three elections, over six rather than four years, for each of the governing bodies). I also noted that more recent elections are generally more probative than older elections in assessing whether the second and third necessary preconditions are satisfied. I also noted that this was especially the case in a city like Springfield, in which, to use Thernstrom’s words, there is a “rapidly changing demographic landscape” (Thernstrom’s Expert Witness Report, para. 26), which makes the relevance of older elections even more questionable.

90. In his Rejoinder, Thornstrom continues to criticize my selection of elections. He does not respond to any of the points raised in my rebuttal concerning the evidentiary requirements expressed in Gingles, however. All he says in the Rejoinder is “I criticized Dr. Engstrom for failing to examine elections before 1999 for the simple reason that minorities have a record of political success that go back decades before 1999” (para. 34). The criticism is no longer in the context of the necessary preconditions expressed in Gingles. Indeed, there are no longer any references to them at all. There is no longer any suggestion that it is necessary to go back “decades before 1999” (emphasis added) to determine whether Gingles’ second and third prongs are satisfied. There is no response to my statement, in rebuttal, that “... it is difficult to take seriously his suggestion that an analysis of elections prior to 1999, for an unknown length of time, will somehow contribute to an understanding of voting behavior in Springfield today” (para. 7).

91. The absence of any reference to these necessary preconditions in Thornstrom’s Rejoinder indicates that he is now aware that he was wrong about the evidence needed to establish the presence of these preconditions. Indeed, he now merely asserts, and without any references, that “History evidence, in my understanding, is essential in order to show that the ‘totality of circumstances’ indicates a voting rights violation” (para. 34, emphasis added). He is presumably referring to the one of the factors identified by the Senate Judiciary Committee, in its Report on the Voting Rights Act Amendments of 1982, (Sen. Rep. No. 97-407, June 18, 1982), as typical things to address in assessing the “totality of circumstances,” to wit, “the extent of any history of official discrimination in the state or political subdivision that touched on the right of

members of the minority group to register, to vote, or otherwise participate in the democratic process” (at 28).<sup>9</sup>

92. Once again Dr. Thernstrom’s “understanding” is flawed, as nothing identifies this factor as essential to a vote dilution claim. This factor is simply one of “a variety of factors” that might contribute to establishing a violation of section 2 (Sen. Rep. at 28). It is not recognized as a necessary factor in the Senate Report, and is not included among the necessary preconditions to a successful section 2 claim identified by the Supreme Court in Gingles. Indeed, the Court stated that if any of the other factors, such as this one, are present, they are “supportive of, but not essential to, a minority voter’s claim” (at 51, emphasis in original).

### **The Estimates of Group Differences in Candidate Preferences**

93. Dr. Thernstrom continues to complain about the estimates of group differences in candidate preferences contained in my Report, despite acknowledging once again that he as well as the defendants “have accepted them for purposes of this litigation” (Rejoinder, para. 35).

94. Prof. Thernstrom repeats his claim, in his Rejoinder, about homogeneous precinct analysis being a check on the results of regression analysis (para. 36). He stated in his Report, in paragraph 55, that homogeneous precinct analysis provides “a method of checking the accuracy of ecological regression estimates” (para. 33, emphasis added). I pointed out in my Rebuttal that homogeneous precinct analysis is not a check on the accuracy of regression estimates, although confidence in an estimate does increase when

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<sup>9</sup> Thernstrom also states, in the final paragraph (47) of his Rejoinder, that it is his understanding that “a successful voting rights complaint must demonstrate” this factor (emphasis added). Again, no authority is cited for this.

other methodologies produce a similar estimate. This does not mean that the other methods provide a baseline from which to evaluate the accuracy of a regression result, however. This is not “a distinction without a difference,” as Thernstrom states in his Rejoinder (para. 36). If an estimate produced by a homogeneous precinct analysis is very far from that produced by a regression analysis, that does not by itself justify a conclusion that the regression estimate is far from the true value. Homogeneous precinct analysis is an inferior estimation procedure in jurisdictions in which many of the precincts are mixed rather than homogeneous, as is the case in Springfield. Homogeneous results therefore do not themselves constitute “a method of checking the accuracy of ecological regression estimates.”

95. While continuing to debate about whether homogeneous precinct estimates are a “check” on regression estimates, Thernstrom completely ignores the substantively important point for this case, which is that whenever homogeneous precinct results are capable of being derived in Springfield, there is a close match between those estimates and the regression estimates. Homogeneous estimates can only be derived for white voters in Springfield, and these estimates were provided in my Report. In addition, a side-by-side comparison of the regression and homogeneous precinct estimates of the white support for minority candidates is provided in my Rebuttal, in Table 1 (Table 9 of this affidavit) for the city council candidates and in Table 2 (Table 10 of this affidavit) for the school committee candidates. These show the estimates produced by the two procedures to be similar. Thernstrom makes no reference to these comparisons in his Rejoinder.



96. Dr. Thernstrom also continues to argue about the statistical significance tests that I report, which are the same tests reported in Gingles and referenced by the Supreme Court in the Gingles decision (at 53). He states his argument as follows:

“He [Engstrom] takes a correlation between the proportion of group members in the various precincts and the vote for various candidates, and assumes that the votes received by particular candidates in that precinct were cast by group members and not by others. We do not know that this assumption is correct ... (para. 37, first emphasis added, second in original).

I make no such assumption. Neither is it an assumption contained in the statistical procedures through which correlation coefficients are derived or regression estimates derived. And Thernstrom provides no reference indicating that it is.

97. Dr. Thernstrom also raises objections to the use of the 2000 Census data to measure the group composition of the voting age population (VAP) of the precincts in the city in the regression analysis for the 2005 elections, and “with somewhat less force” to the analysis of the 2003 elections (Rejoinder, para. 38). He states that “between 2000 and 2005, the non-Hispanic share of the VAP dropped by 18 percent, and the Latino proportion soared by 38 percent” (para. 38, emphasis added). Yet these figures are much higher than those he reports in Table 2 of his Rejoinder (at 10). According to Table 2, which is based on the estimates provided by the American Community Survey for 2005, the share of the VAP that non-Hispanic whites comprised declined by much less, 9 percentage points, from 2000 to 2005 (at 10), while the Hispanic share of the VAP increased by much less, 8.5 percentage points, and the African American share was basically the same, increasing by only 1.4 percentage points. He provides no figures for the intervening changes for 2003. His point is that, given these changes, the regression estimates “cannot be accurate.” But Thernstrom makes no effort, or at least reports no

effort, to indicate how far from accurate he thinks they are, and whether the differences would result in the absence of, or even a significant reduction in, racially polarized voting.

98. Dr. Thernstrom also complains about what he describes as “Yet another problem, even more serious perhaps” (Rejoinder, para. 39). The problem, he states, is that “Hispanics in Springfield are much less likely to cast a ballot on election day than whites are,” and more specifically, that it is “the most heavily Latino areas having [turnout] rates far below the city-wide average.” He then claims that “To the extent to which that is true, it follows that Dr. Engstrom must have severely underestimated the level of white (and in some precincts black) support for Latinos” (emphasis added). This again reflects Thernstrom’s lack of understanding of regression analysis, and perhaps his mistaken assumption about it that I identify in paragraph 95 above.

99. Thernstrom’s suggestion that I “must have severely underestimated” white crossover voting for Latino candidates is simply not correct. In fact, given the group demographics of precincts in Springfield, if the presence of Latinos among those voting is overreported by the measure of the group’s presence in the precincts (i.e., their share of the precinct VAP exceeds their percentage of the voters), then regression analysis is likely to systematically underestimate their own support for their preferred Latino candidates. This means that my estimates of Latino support for Latino candidates are more likely to be lower than the true values, not higher. In addition, given the precinct demographics in Springfield, the impact on the estimates for whites is likely to be minimal, because whites are far more likely to reside in precincts that are heavily white

than Hispanics in precincts that are heavily Hispanic, and lower Hispanic turnout in these precincts will make less difference in the relative presence of whites among those voting.

100. This can be illustrated by redoing the regression analyses using data reflecting the percentage of the people receiving ballots in each precinct that is Hispanic based on the number of them that has a Spanish surname, rather than the percentage of the voting age population that is Hispanic. The Spanish surname counts have been provided by the plaintiffs' attorneys for the 1999, 2001, and 2003 elections, and are relied upon by Dr. Thernstrom in paragraph 29 of his Rejoinder (see also Appendix A to his Rejoinder). These data were not used in my polarized voting analysis because comparable numbers were not available for African Americans. The use of these data would have resulted in the two independent variables in my multiple regression analyses, percent Hispanic and percent African American, being measured differently. But I will now use these data to illustrate my point about Dr. Thernstrom's suggestion being wrong.

101. When the percentage of those turning out to vote that is Hispanic in every precinct is substituted for the percentage of the VAP that is Hispanic in the precincts in the regression analyses, the estimate of the Hispanic support for Hispanic candidates increases, as expected, while the white support for these candidates is basically unaffected. The differences in the estimates are reported in Table 11. The range of the increases in the estimated Hispanic support for these candidates is from 9.6 percentage points to 19.2. The range in the increases in the estimated white support is, in contrast, 0.1 percentage points to 2.1. The estimates for African Americans show more crossover than previously, from 2.2 percentage points to 7.8. These results, reported in Table 11, indicate that Thernstrom's statement that I must have "severely underestimated" the

white crossover for Latino candidates is simply not correct, and, if anything, my estimates are more likely to underestimate Latino support for the Latino candidates.

102. Dr. Thernstrom also presents two hypotheticals that he thinks bolster his argument. One assumes that Latino voters cast 100 percent of their votes for each of the Latino candidates, the other, which he acknowledges to be “an absurd extreme case” (para. 39), assumes all Latinos “boycotted an election” (para. 39). There is no evidence that either of these hypotheticals even remotely approach a situation present in Springfield elections, and therefore they have no relevance to the estimates of group support that I report.

103. Dr. Thernstrom further asserts that “an additional complication that could bias his [Engstrom’s] results comes from the fact that Springfield’s voters may cast a ballot for as many as nine candidates, each for each seat on the council” (para. 40). For clarity, “ballot” in this sentence obviously means a separate and distinct vote, for which any specific ballot can contain up to nine.<sup>10</sup> And Thernstrom does subsequently report figures for “the percentage of the possible choices [that] were unexercised.” The “complication” that Thernstrom asserts however appears to be that the ability of a voter to cast nine or fewer votes makes it impossible to estimate the “proportion of the ballots [votes] cast for candidate X in precinct Y [that] came from whites, blacks, or Latinos” (emphasis added). I do not report any precinct level estimates, however, but only citywide estimates, and I do not report estimates of the percentage of a candidate’s total

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<sup>10</sup> The election returns for the 2005 election contain an entry for “ballots cast,” which reports the number of voters receiving a ballot, and also contains an entry for “blanks,” which reports how many of the nine votes available to voters were not cast.

vote that was received from a particular group, but rather estimates of the percentage of the voters from that group that cast a vote for a particular candidate.

104. For the purpose of assessing racially polarized voting, the percentage of a group's voters that supports a particular candidate is of course the appropriate percentage to report, rather than the percentage of his or her total votes that the candidate received from that group. The issue in a polarized voting analysis is not whether the absolute number of votes cast for a candidate of their choice by a group of voters, for example minority voters, exceeds the number cast for that candidate by a larger group of voters, for example, white voters. It is rather the relative levels of support within the two groups for that candidate.

105. A simple example illustrates that it is the relative levels of support for the candidate within the groups that is of interest, not the groups' respective shares of the candidate's total vote. Assume that an election in a single member district for a councilmanic seat was contested by two candidates, one white and the other African American. There were 100 voters in the district, 80 of which were white and 20 of which were African American. All 20 of the African Americans voted for the African American candidate. Only 21 of the 80 whites voted for the African American, the other 59 voted for the white. The African American candidate would lose, 59 to 41. He or she would have received a majority of their votes, 21 of the 41 or 51.2 percent, from white voters. But that vote would be racially polarized, given that only 26.2 percent of the white voters voted for the African American, compared to 100 percent of the African Americans.

106. The above example illustrates that a larger group can contribute a larger share of the votes cast for a particular candidate, and that the votes of the group still be decisive in the defeat of that candidate. In short, the larger group of voters can cast a larger number of votes for a candidate that is overwhelmingly supported by a smaller group of voters, yet that candidate not be a candidate of choice of the larger group. When each voter in an election may cast multiple votes, such as up to nine, rather than just one, and nine candidates are elected, not just one, it is even more critical that the analysis focus on the appropriate percentage and that the votes cast within the group for all of the candidates competing in the election be reported.

107. Dr. Thernstrom also states, in paragraph 41 of his Rejoinder, that “Dr. Engstrom objects to my criticism of the loose use of the concept of ‘racial polarization’ -- the notion that two racial groups are politically ‘polarized’ if their voting patterns are not identical.” He then provides a footnote for this statement, which says “Engstrom Rebuttal Report, para. 19 and 20.” Anyone who reads paragraphs 19 and 20 of my Rebuttal (or paragraphs 75 and 76 of this affidavit, which are the same as paragraphs 19 and 20 of my Rebuttal) would have no idea what he is talking about here, for there is nothing about identical voting patterns in those paragraphs. Nor have I ever maintained that any deviation from identical voting patterns constitutes “polarization.” And again, if he is suggesting that I have, he provides no references to so indicate.

108. He continues by stating that “I have never seen cross-tabulations of voting behavior by social characteristics that did not reveal differences in every indicator.” Then, in a non sequitur, he follows with “Dr. Engstrom, though, vigorously denies that ‘race is just another social cleavage’” (para. 41). It is hard to respond to this comment

because it simply makes no sense. I did respond, in paragraph 19 of my Rebuttal (paragraph 75 herein), to Thornstrom's statement, found in paragraph 96 of his Expert Witness Report, that:

Divide Americans into groups on the basis of any social characteristic you can think of – sex, religion, income, occupation, marital status, educational attainment, suburban versus central city residence, region, and countless others – and you will find distinct political differences between them. So too with race.

I pointed out that Thornstrom, without any reference to any research, his own or others, treats race in this statement as if it is “just another social cleavage, similar to gender, for example, or marital status, or educational attainment” (Rebuttal, para. 20; paragraph 75 herein).

109. I also pointed out, with references to published research, that this is simply wrong, and that race is “the most pronounced” cleavage. Thornstrom apparently misses the point that there is a huge difference in the magnitude of the racial cleavage in American politics and the divisions based on gender, marital status, educational attainment, and the other characteristics he mentions. And he has no response to this in his Rejoinder. He states that other social divisions “are not reducible to social class either,” but this does not address the relative magnitude of those divisions compared to racial divisions.

110. He does refer, however, in paragraph 43, to “the current highly distinct political behavior of African Americans” (emphasis added), but then refers to African Americans prior to the New Deal and Irish Americans back in the 1950s. The relevance of these comparisons to the difference in the magnitude of social divisions today is not stated, and certainly not obvious.

111. In the next paragraph (44), Thernstrom informs us that “Latinos are not a ‘race’” but rather an “ethnic group.” The need for this is also unclear. And what it has to do with a Rejoinder to my work is particularly unclear, given that in my Report I refer to differences in candidate preferences “along racial and ethnic group lines” (see paragraphs 8 and 55 of my Report; paragraphs 9 and 56 herein).

112. Thernstrom also states in paragraph 44 that “the fundamental issue in this case is whether a districted system of electing the city council and school committee would help to empower Hispanics.” He does not state why the African American plaintiffs’ dilution claim is not also a fundamental issue in this case.

113. In paragraph 45 he also informs us that the Latino vote is “not politically monolithic” and that “... it would be hard to argue that the political behavior of Latinos is ‘really racial.’” I have no idea how any of this constitutes a rejoinder to anything contained in my Report, or Rebuttal, or deposition testimony.

114. Finally, Dr. Thernstrom ends, in paragraph 46, with a bizarre statement in which he suggests that I advance “a novel and dismaying argument.” He seems to believe that I argue that election officials should maintain separate counts of the votes cast by whites, African Americans, and Latinos, and that somehow I interpret the Voting Rights Act “as requiring a new form of political segregation, with ‘reserved seats’ for each group.”

115. I do note, in paragraphs 21 through 29 of my Rebuttal (paragraphs 77 through 85 herein), the comparative rankings of where the candidates finished among the votes cast by whites, by African Americans, and by Latinos, based on my regression estimates. This examination exposes the deceptive comment by Thernstrom that



“substantial numbers of whites” vote for black preferred or Latino preferred candidates (Expert Witness Report, para. 61). This is not the case for the minority candidates preferred by their respective groups.

116. Identifying only the percentage of whites that supported a particular candidate without comparing white support for the other candidates ignores how the competition is structured in these multiple vote, multiple seat elections. Unlike elections in which voters have one vote, in these elections voters that vote for a candidate can also vote for other candidates. As noted above, in paragraph 106, assessing group support levels for candidates in this context must take into account the group’s support for the other candidates as well. In these types of elections, in which three or nine candidates are being elected from the same pool of candidates and voters, it is where the candidates place in the vote that matters. When this is accounted for, then it is revealed that “only once across the eight elections would a minority candidate have won a seat, if only white votes were counted, over a white candidate” (my Rebuttal, at para. 25). And this instance occurred in the election held following the filing of this lawsuit, that of 2005.

117. The relative rankings likewise expose another deceptive comment by Thornstrom, which is that Latinos provided less support for 17 of the 18 African American candidates than white voters, and that African American voters provide less support for eight of the 11 Latino candidates than white voters (Expert Witness Report, p. 44). If support levels are examined in terms of relative support across the candidates, however, the evidence reveals that Latino voters have tended to rank African American candidates higher than have white voters, while African American voters have tended to rank Latino candidates higher than have white voters. Eight of the African American

candidates placed higher within the Latino vote than the white vote, while only three placed higher in the white vote than the Latino vote. (Seven of the candidates finished in equal positions within the two groups.) Likewise, eight of the Latino candidates placed higher within the African American vote than the white vote, while only two placed higher within the white vote than African American vote. (Only one was placed equally by the two groups.) When the support for minority candidates is placed in the full competitive context, African American candidates do better among Latino voters than whites, and Latino candidates do better among African American voters than whites, which is just the opposite of what Thernstrom reports.

118. This is nothing difficult to understand, nor is there anything “novel” or “dismaying,” about comparing the relative placement of candidates within groups in elections. Indeed, in the Gingles opinion, the testimony of Dr. Bernard Grofman is cited for the conclusion that the degree of racially polarized voting was “so marked as to be substantively significant, in the sense that the results of the individual election would have been different depending upon whether it had been held among only the white voters or only the black voters” (at 54).<sup>11</sup> How Dr. Thernstrom infers that the same analysis by me is a call for separate counts and reserve seats is something that only he must be capable of explaining. I certainly cannot.

119. I stand by my interpretation of the results of the racially polarized voting analysis that I have conducted, Thernstrom notwithstanding (Rejoinder, para. 35).

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<sup>11</sup> The voter registration data in North Carolina relied upon as the independent variable in Grofman’s racially polarized voting analysis for the Gingles case divided voters into only two groups, white and non-white. Given the racial demographics of non-whites in North Carolina, these voters were referred to as black in that analysis.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge and that this Affidavit was executed on March 15, 2007.

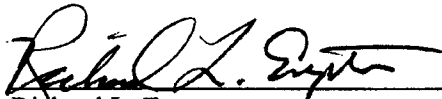
  
Richard L. Engstrom

TABLE 1

## Springfield City Council Election 1999

## Estimated Divisions in Candidate Preferences

Candidate* <u>Rank</u>		<u>Percent of African American Voters</u>	<u>Percent of Latino Voters</u>	<u>Percent of White Voters</u>
<b><i>Lewis-Caulton</i></b>	<b>9</b>	106.4*	10.5*	30.2
<b><i>Williams</i></b> (I)	<b>6</b>	93.3*	43.1	38.7
Foley (I)	1	35.2*	57.4*	66.2
Sarno	2	28.4*	48.8*	64.8
T. Ryan (I)	3	13.2*	43.6*	65.6
Kelly (I)	4	13.9*	46.6*	58.9
B. Santaniello(I)	5	34.2*	50.8	52.0
Puppolo (I)	7	15.6*	47.0	51.7
Rooke (I)	8	7.8*	38.9	53.5
J.Ryan	10	10.8*	31.0*	44.4
S. Santaniello	11	26.6*	36.5	38.9
Garde (I) <sup>12</sup>	12	35.9*	29.7	28.7
Branch	13	19.5*	26.7	30.5
Walsh	14	6.3*	12.6*	25.8

\*African American candidates in ***bold italicized*** letters.

Incumbents identified by (I) following their name.

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<sup>12</sup> Barbara Garde withdrew from the City Council race prior to election day, but after the deadline to remove her name from the ballot had passed.

TABLE 2

## Springfield City Council Election 2001

## Estimated Divisions in Candidate Preferences

<u>Candidate*</u> <u>Rank</u>		<u>Percent African</u> <u>American Voters</u>	<u>Percent of</u> <u>Latino Voters</u>	<u>Percent of</u> <u>White Voters</u>
<b><i>Williams (I)</i></b>	3	99.6*	22.8*	48.7
<b><i>Lewis-Caulton(I)</i></b>	11	96.3*	11.1*	38.3
<b><i>Rucks</i></b>	12	77.4*	3.4*	20.7
<b><i>Stokes</i></b>	14	45.5*	6.5*	10.0
<b>Tosado</b>	10	29.4*	75.0*	36.4
<b>Cortes</b>	13	6.9	67.9*	8.5
Foley (I)	1	31.1*	27.2*	68.4
Santaniello (I)	2	34.1*	28.2*	64.6
Moriarty	4	19.2*	26.2*	64.5
Rooke (I)	5	14.6*	20.2*	65.8
Puppolo (I)	6	18.0*	24.5*	62.5
Sarno (I)	7	14.6*	19.0*	63.2
Ryan (I)	8	12.8*	16.7*	64.1
Kelly (I)	9	13.8*	16.1*	61.7

\*African American candidates in ***bold italicized*** letters.

Hispanic candidates in **bold** letters.

Incumbents identified by (I) following their name.

**TABLE 3**  
**Springfield City Council Election 2003**

**Estimated Divisions in Candidate Preferences**

<u>Candidate*</u> <u>Rank</u>		<u>Percent of African</u> <u>American Voters</u>	<u>Percent of</u> <u>Latino Voters</u>	<u>Percent of</u> <u>White Voters</u>
<b><i>Lewis-Caulton</i></b>	12	101.3*	3.6*	25.9
<b><i>Williams (I)</i></b>	7	96.7*	20.7*	35.7
<b><i>Jones</i></b>	13	69.7*	12.4*	19.4
<b><i>Wray</i></b>	18	31.9*	7.1*	15.1
<b>Tosado (I)</b>	3	44.6*	78.4*	38.0
<b>Cortes</b>	17	9.8	56.5*	12.6
Foley (I)	1	37.8*	26.9*	59.8
Sarno (I)	2	24.8*	18.3*	62.5
Puppolo (I)	4	19.5*	21.4*	55.9
Moriarty (I)	5	34.9*	27.3*	49.5
Kelly (I)	6	18.0*	13.0*	56.7
Walsh	8	39.8*	15.9*	49.8
Rooke (I)	9	15.3*	15.2*	54.4
Ryan	10	6.3*	17.1*	52.9
Sears	11	7.3*	14.3*	50.9
Santaniello	14	19.4*	16.3*	27.7
Ranacitelli	15	3.5*	17.9*	29.5
Cahillane	16	-0.4*	13.1*	30.2

\*African American candidates in ***bold italicized*** letters.

Hispanic candidates in **bold** letters.

Incumbents identified by (I) following their name.

**TABLE 4**  
**Springfield City Council Election 2005**

**Estimated Divisions in Candidate Preferences**

<u>Candidate*</u> <u>Rank</u>		<u>Percent of African</u> <u>American Voters</u>	<u>Percent of</u> <u>Latino Voters</u>	<u>Percent of</u> <u>White Voters</u>
<b><i>Williams (I)</i></b>	<b>6</b>	102.2*	29.8	34.2
<b><i>Oliver</i></b>	13	42.0*	16.6	18.9
<b><i>Wray</i></b>	12	35.0*	14.9*	23.0
<b>Tosado (I)</b>	<b>4</b>	42.1	76.4*	39.2
<b>Nazario</b>	15	10.2*	44.9*	15.6
<b>Concepcion</b>	11	18.3*	20.6*	36.4
Sarno (I)	1	34.1*	27.8*	60.5
Foley (I)	2	39.5*	35.5*	52.1
Moriarty (I)	3	40.5*	32.6*	50.5
Puppolo (I)	5	26.1*	28.5*	52.2
Rooke (I)	7	23.2*	21.0*	49.4
Walsh (I)	8	45.0*	23.5*	43.4
Stebbins	9	16.3*	8.9*	47.1
Ferrera	10	3.0*	19.0*	43.4
Lysak	14	9.3*	6.3*	26.6
Underwood	16	10.7*	11.0*	20.2
Silverman	17	6.1*	7.7*	20.6
Anziano	18	6.3*	16.5	17.6

\*African American candidates in ***bold italicized*** letters.

Hispanic candidates in **bold** letters.

Incumbents identified by (I) following their name.

TABLE 5

## Springfield School Committee Election 1999

## Estimated Divisions in Candidate Preferences

Candidate* <u>Rank</u>		<u>Percent African American Voters</u>	<u>Percent of Latino Voters</u>	<u>Percent of White Voters</u>
<b><i>McCollum</i></b> (I) 4		100.8*	23.7	29.3
<b>Tosado</b> 2		29.7	79.0*	38.0
Ash 1		17.7*	43.7*	77.3
Conway (I) 3		25.4*	15.8*	54.2
Bernard (I) 5		11.1*	24.0*	41.5

\*African American candidates in ***bold italicized*** letters.

Hispanic candidates in **bold** letters.

Incumbents identified by (I) following their name.



TABLE 6

## Springfield School Committee Election 2001

## Estimated Divisions in Candidate Preferences

<u>Candidate*</u> <u>Rank</u>		<u>Percent of African</u> <u>American Voters</u>	<u>Percent of</u> <u>Latino Voters</u>	<u>Percent of</u> <u>White Voters</u>
<b><i>Hurst</i></b> (I) 3		105.5*	18.4*	42.8
<b><i>Parker</i></b> 5		59.6*	12.3	13.0
Fyntrilakis (I) 1		19.8*	44.4*	66.8
Shea (I) 2		16.6*	27.8*	63.8
Rodgers 4		-1.5*	31.4*	49.4

\*African American candidates in ***bold italicized*** letters.  
Incumbents identified by (I) following their name.

TABLE 7

## Springfield School Committee Election 2003

## Estimated Divisions in Candidate Preferences

Candidate* <u>Rank</u>		<u>Percent of African American Voters</u>	<u>Percent of Latino Voters</u>	<u>Percent of White Voters</u>
<b><i>McCollum (I)</i></b>	4	95.3*	7.3*	34.3
<b>Davila</b>	6	12.8	66.6*	8.4
Ashe (I)	1	30.9*	33.7*	69.4
Murphy	2	28.7*	27.5*	51.1
Pepe	3	34.4*	17.3*	49.0
Rodgers	5	3.4*	13.2*	41.8

\*African American candidates in ***bold italicized*** letters.

Hispanic candidates in **bold** letters.

Incumbents identified by (I) following their name.

TABLE 8

## Springfield School Committee Election 2005

## Estimated Divisions in Candidate Preferences

<u>Candidate*</u> <u>Rank</u>		<u>Percent of African</u> <u>American Voters</u>	<u>Percent of</u> <u>Latino Voters</u>	<u>Percent of</u> <u>White Voters</u>
<b><i>Hurst (I)</i></b>	<b><i>1</i></b>	110.6*	23.5*	45.8
<b>Santiago</b>	4	30.1	66.9*	33.2
<b>Davila</b>	5	21.6	56.2*	24.2
Shea (I)	2	24.4*	21.3*	60.2
Rodgers (I)	3	4.2*	17.0*	53.2

\*African American candidates in ***bold italicized*** letters.

Hispanic candidates in **bold** letters.

Incumbents identified by (I) following their name.

TABLE 9

## Springfield City Council Elections

## Estimated Support for Minority Candidates by White Voters

## Results from Regression and Homogeneous Precinct Analyses

Minority Candidate*	Regression Estimate %	Homogeneous Precincts Estimate %
<u>1999</u>		
<i>Lewis-Caulton</i>	30.2	32.9
<i>Williams</i>	38.7	40.1
<u>2001</u>		
<i>Williams</i>	48.7	47.8
<i>Lewis-Caulton</i>	38.3	38.1
<i>Rucks</i>	20.7	24.3
<i>Stokes</i>	10.0	9.4
<b>Tosado</b>	36.4	36.3
<b>Cortes</b>	8.5	10.3
<u>2003</u>		
<i>Lewis-Caulton</i>	25.9	27.0
<i>Williams</i>	35.7	36.6
<i>Jones</i>	19.4	20.6

<i>Wray</i>	15.1	18.6
<b>Tosado</b>	38.0	39.7
<b>Cortes</b>	12.6	12.8

2005

<i>Williams</i>	34.2	36.0
<i>Oliver</i>	18.9	16.8
<i>Wray</i>	23.0	23.1
<b>Tosado</b>	39.2	38.7
<b>Nazario</b>	15.6	15.9
<b>Concepcion</b>	36.4	30.2

\*African American candidates in *italicized* letters.  
Hispanic candidates in **bold** letters.

TABLE 10

## Springfield School Committee Elections

## Estimated Support for Minority Candidates by White Voters

## Results from Regression and Homogeneous Precinct Analyses

Minority Candidate*	Regression Estimate %	Homogeneous Precincts Estimate %
<u>1999</u>		
<i>McCollum</i>	29.3	34.8
<b>Tosado</b>	38.0	40.1
<u>2001</u>		
<i>Hurst</i>	42.8	43.9
<i>Parker</i>	13.0	12.6
<u>2003</u>		
<i>McCollum</i>	34.3	39.0
<b>Davila</b>	8.4	9.4
<u>2005</u>		
<i>Hurst</i>	45.8	45.8
<b>Santiago</b>	33.2	33.0
<b>Davila</b>	24.2	24.4

\*African American candidates in *italicized* letters.  
Hispanic candidates in **bold** letters.

**TABLE 11**

Springfield City Council Elections  
Estimated Divisions in Candidate Preferences

First Row of Estimates using Hispanic Percent of VAP  
Second Row of Estimates using Hispanic Percent of Turnout

<u>Latino Candidates</u>	<u>Percent of African American Voters</u>	<u>Percent of Latino Voters</u>	<u>Percent of White Voters</u>
1999 School Committee			
Tosado	29.7	79.0	38.0
	36.5	98.2	39.3
2001 City Council			
Tosado	29.4	75.0	36.4
	31.6	87.7	37.1
Cortes	6.9	67.9	8.5
	13.2	82.3	10.1
2003 City Council			
Tosado	44.6	78.4	38.0
	50.5	90.4	38.1
Cortes	9.8	56.5	12.6
	16.5	66.1	13.2
2003 School Committee			
Davila	12.8	66.6	8.4
	20.6	79.6	10.5